

**Materials and Methods:** Total 331 blood samples were collected from pregnant women who referred to rural and urban health centers Aleshtar city. All samples were evaluated with ELISA IgG and IgM *Toxoplasma* performed for detecting of total antibody against *Toxoplasma gondii*.

**Results:** In this study the seroprevalence of toxoplasmosis in urban and rural pregnant women were 36.2% and 44% respectively. Therefore, the seroprevalence of total IgG in urban and rural pregnant women were 25%, 34.6% and the seroprevalence of total IgM in these population were 11.2% and 9.45% respectively. There was a significant relationship between serology results (IgG, IgM) with education, individuals age, contact with meat, cat keeping, type of food, washing vegetables, vegetables consumption and milk in urban and rural pregnant women ( $p < 0.05$ ).

**Conclusion:** The results of this study show that the high level of education and preferment of general health awareness might be reduce the risk of toxoplasma infection. Therefore, prevention performance and control programs are necessary.

**PP-186 Evaluation of protoscolices and germinal layer DNA of the sheep strain (genotype 1) of *Echinococcus granulosus*: Are these having similar production?**

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**Background:** The histology of a typical hydatid cyst demonstrates the germinal layer as the primary site of parasite development which produces the hydatid fluid and small secondary cysts known as brood capsules. Protoscolices are produced within the brood capsules over time. The aim of this survey was to compare DNA products of protoscolices and germinal layer origin from Iranian sheep strain *E. granulosus* isolates.

**Material and Method:** Forty-five infected organs of cattle, sheep and goat were collected. All these cysts were examined to determine their fertility by microscopic observation of protoscolices. Thirteen of 15 bovine cysts, 5 of 15 ovine cysts and 4 of 15 goats cysts were unfertile respectively. For each fertile cyst, protoscolices were aspirated and for unfertile cyst germinal layer were extracted and washed several times with PBS. DNA of fertile and unfertile cysts was extracted with modified Phenol chloroform method.

**Results:** There were no significant differences of quality observed between these two types of extracted DNA, in equal of each fertile and unfertile cyst samples after RCR reaction using 12S rRNA gene.

**Discussion:** In this study we can determine the genotype of *E. granulosus* in both fertile and unfertile cyst using the DNA of protoscolices and germinal layer. In addition, according to our evidence we suggest that the procedure of the extracted DNA of protoscolices is better than germinal layer.

**PP-187 Prevalence of Hydatid cyst in Varamin, Tehran**

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**Background:** In Hydatid cyst (HC), caused by *Echinococcus granulosus*, the liver is the first and the most frequent

involved organ followed by lung. The present study was conducted to determine the prevalence of HC in surgery ward of Dr. Mofatah Hospital, Varamin, Tehran.

**Material and Method:** In this descriptive study 2,877 medical records of patients who referred to surgery ward of Dr. Mofatah Hospital were studied. These patients had undergone surgical operations for different reasons. Medical records of patients who had been HC positive were collected and analyzed.

**Results:** Two HC positive were observed among studied medical records. Both of these patients were female with age 40 and 64 years old. Both were housewives and Liver was the involved organ. There was no relationship between incidence of HC and age of patients. The woman, in case 1, was operated for cysts in the liver, without receiving pharmacological prophylaxis. The woman, in case 2, was admitted with chest pain. She underwent surgical treatment of HC, during the previous year. The patient was treated with Albendazole.

**Conclusion:** Echinococcosis is still an important health problem in Iran that needs further studies. Therefore, accurate information on the distribution of the disease is first step for the control and prevention. Moreover, it is necessary that in each province the role of different intermediate hosts and the strains of *E. granulosus* in human and animals be investigated.

**PP-188 Immunomodulation of hepatic morbidity in murine Schistosomiasis mansoni using fatty acid binding protein**

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Hepatic fibrosis and portal hypertension are responsible for morbidity in schistosomiasis mansoni. The objective of this study was to evaluate the possible anti-morbidity effect of fatty acid binding protein (FABP) of *Schistosoma mansoni* when given to mice before infection.

Multiple small doses of FABP were injected intraperitoneally into experimental animals (100 µg of purified FABP followed 2 weeks later by two booster doses of 50 µg each at weekly intervals) and the experimental design included 3 groups of 15 mice each; the first group received FABP (immunized group), the second group was injected with the 3 doses of FABP one week prior to infection with 100 *S. mansoni* cercariae (immunized-infected group) and the third group served as infected control.

Data revealed reduction in CD4<sup>+</sup> cells and increase in CD8<sup>+</sup> cells of hepatic granuloma in FABP-immunized infected group, resulting in significant decrease in CD4<sup>+</sup>/CD8<sup>+</sup> ratio, in comparison to infected control group; the serum cytokine levels of both TNF-alpha and IFN-gamma were also significantly decreased. Histopathological examination of liver revealed remarkable increase in percent of degenerated ova within hepatic granuloma which decreased in diameter (12%). In this study, significant reductions in worm burden (46%) and tissue egg loads (42.8% and 50% for hepatic and intestinal ova respectively) were observed in addition to decreased percent of immature stages with increase in percent of dead ova in Oogram pattern.

This work could present a trial contributing to shaping the severity of hepatic morbidity.